REMARKS

Applicants wish to thank Examiner Toomer for indicating allowability of Claims 15, 17, 20, 42, 44 and 47 if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

Claims 1, 26 and 63 have been amended so that the monomers are now (A) (i) at least one (meth)acrylic acid amide selected from the group consisting of N,Ndimethylaminopropyl methacrylamide, N,N-dimethylaminoethyl methacrylamide and a mixture thereof or (ii) at least one (meth) acrylic acid ester. In addition, a concentration of N,N- diethylhydroxylamine and of N-nitroso-N-phenylhydroxylamine or its salt of 10 to 500 ppm each has been included in these claims.

The present invention as set forth in amended Claim 1 relates to a stabilized monomer composition, comprising:

- (A) (i) at least one (meth)acrylic acid amide selected from the group consisting of N,N-dimethylaminopropyl methacrylamide, N,N-dimethylaminoethyl methacrylamide and a mixture thereof or (ii) at least one (meth) acrylic acid ester;
 - (B) N,N-diethylhydroxylamine; and
 - (C) N-nitroso-N-phenylhydroxylamine or its salt;

wherein a weight ratio of N,N-diethylhydroxylamine to N-nitroso- Nphenylhydroxylamine or its salt is from 1:1 to 10:1;

Amendment Dated: September 22, 2003

wherein a concentration of N,N- diethylhydroxylamine is 10 to 500 ppm based on the total weight of said stabilized monomer composition; and

wherein a concentration of N-nitroso-N-phenylhydroxylamine or its salt is 10-500 ppm based on the total weight of said stabilized monomer composition.

Amended Claim 26 relates to the synthesis of such stabilized monomer composition.

Amended Claim 63 relates to a stabilized monomer composition which additionally comprises (D) a solvent selected from the group consisting of benzene, toluene, n-hexane, cyclohexane, methyl isobutyl ketone, methyl ethyl ketone and mixtures thereof.

None of <u>Halle et al</u> and <u>EP 0467 850 A1</u> disclose or suggest the claimed combination of N,N-diethylhydroxylamine and N-nitroso-N-phenylhydroxylamine or its salt, in a weight ratio of from 1:1 to 10:1, and in concentrations of 10 to 500 ppm in a monomer composition.

Halle et al disclose a large number of organic polymerization inhibitors at col. 3, lines 24-42. However, there is no disclosure or suggestion of a combination of N,Ndiethylhydroxylamine; and N-nitroso-N-phenylhydroxylamine or its salt in a weight ratio of from 1:1 to 10:1 as claimed. Based on the disclosure of this reference, one of ordinary skill in the art would not have any motivation to combine the two claimed inhibitors in the claimed ratio and in concentrations of 10 to 500 ppm. In fact, the Examples of Halle et al only use one inhibitor at a time, namely N,N-diethylhydroxylamine.

The Examiner has argued that a prima facie case of obviousness exists to combine two stabilizers. Even if the Examiner can make a proper prima facie case of obviousness, such has been rebutted by the superior results shown in the Examples of the specification and

Reply to Office Action of: June 19, 2003 Amendment Dated: September 22, 2003

the Rule 132 Declarations.

Examples 1 and 2 at pages 12 and 13 of the specification which exhibit polymer formation while the claimed monomer composition (Example 1) does not polymerize during distillation. Note that Comparison Example 1 has N-nitroso-N-phenylhydroxylamine only.

Comparison Example 2 has N,N-diethylhydroxylamine only. In Example 1, no polymerization was observed within 8.5 hours. In Comparison Example 1, polymer formation took place after 5 hours and the distillation had to be stopped. In an industrial setting this means that precious time is lost in order to clean the column from polymer. Additional cost arise under these circumstances. However, this is exactly the problem, the present invention addresses. In Comparison Example 2, the polymerization was so rapid that the experiment had to be stopped before any 2-hydroxyethyl acrylate could be isolated. Thus, the present invention is not anticipated by or obvious over Halle et al.

In addition, the Rule 132 Declaration filed March 14, 2003, shows that the monomer composition of Example A (according to the present invention) which has hydroxyethyl methacrylate raw ester as a monomer distills over at 0.71 l/h without formation of polymer due to the presence of the claimed combination of stabilizers.

In contrast, <u>Comparison Example B</u> also having hydroxyethyl methacrylate raw ester, but without additional stabilization forms a polymer in an upper region of the thin-film evaporator and in the distillation column.

Applicants attach herewith a new Rule 132 Declaration which shows that only the

Reply to Office Action of: June 19, 2003 Amendment Dated: September 22, 2003

combination of stabilizers according to the present invention results in superior stabilization of **DMAPMA raw amide** so that no polymer was formed even after 104 days.

EP 0467 850 A1 discloses a combination of a phenothiazine with a hydroxylamine such as N,N-diethylhydroxylamine or N,N-di-tert-butylhydroxylamine (EP 0467 850 A1, page 5, lines 9-12). N,N-diethylhydroxylamine to N-nitroso- N-phenylhydroxylamine is not mentioned. There is no disclosure or suggestion of the claimed combination of N,Ndiethylhydroxylamine; and N-nitroso-N-phenylhydroxylamine or its salt in a weight ratio of from 1:1 to 10:1 and claimed concentration of 10 to 500 ppm. There is a disclosure that additional inhibitors may be used in EP 0467 850 A1. However, a long list of general groups of inhibitors is given. One of these includes nitrosophenylhydroxylamines. None of the Examples of EP 0467 850 A1 have a combination of N,N-diethylhydroxylamine; and Nnitroso-N-phenylhydroxylamine or its salt in a weight ratio of from 1:1 to 10:1 in the claimed concentration of 10 to 500 ppm. In fact, a specific weight ratio of a hydroxylamine inhibitor and a nitrosophenylhydroxylamine inhibitor is not disclosed at all. Based on this information, one of ordinary skill in the art cannot readily envision a composition as claimed having N,Ndiethylhydroxylamine; and N-nitroso-N-phenylhydroxylamine or its salt in a weight ratio of from 1:1 to 10:1 and in the claimed concentration. Thus, the present invention is not anticipated by or obvious over EP 0467 850 A1.

Even if the Examiner can make a proper prima facie case of obviousness, such has been rebutted by the superior results shown in the Examples of the specification and the Rule 132 Declarations.

Reply to Office Action of: June 19, 2003 Amendment Dated: September 22, 2003

Therefore, the rejection of Claims 1, 2, 11-13, 22-24, 26, 28-40, 49-50, 62 and 63 under 35 U.S.C. §103(a) over <u>Halle et al</u> and the rejection of Claims 1, 2, 11, 13, 14, 16, 18-19, 21, 24-26, 29-39, 41, 43, 45, 46, 48, 50 and 62 under 35 U.S.C. §103(a) over <u>EP 0467</u> 850 A1 is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

Applicants wish to point out that if Claims 1, 26 and 63 are allowable, no further search is required and Claims 51 and 53-67 should be allowable as well (<u>In re Ochai</u>, 71 F.3d 1565 (Fed. Cir. 1995)).

Reply to Office Action of: June 19, 2003 Amendment Dated: September 22, 2003

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Customer Number 22850

Norman F. Oblon Attorney of Record Registration No.: 24,618

Kirsten A. Grueneberg, Ph.D. Registration No.: 47,297

NFO:KAG: